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TITLE OF THE INVENTION

Magnetron

E.A.
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This application claims the priority of Japanese patent application No 2002-222781 filed on July 31, 2002.

BACKGROUND OF THE INVENTION

The present invention relates to a magnetron for use in microwave ovens and the like, and more particularly to a mechanism for restraining the leakage of harmonic components from the output portion of the magnetron.

Generally, a magnetron for a microwave oven generates a microwave of 2.45 GHz as a fundamental wave. When generating the microwave, the magnetron generates harmonic components having frequencies of integral multiples of the fundamental wave in addition to the fundamental wave, simultaneously. When the harmonic components are radiated from the output portion, just like the fundamental wave, the harmonics are propagated into the microwave oven. Since the wavelengths of the harmonics are short, when they are propagated once into the microwave oven, it is difficult to prevent their leakage to the outside of the microwave oven. Since leakage power leaked to the outside of the microwave oven may cause wireless communication failures, the limit of the leakage is controlled by law in Japan.

Hence, in order to restrain harmonic